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ABSTRACT

In a Behavior Analysis classroom the first step is to define instructional objectives for academic or social skills. The seccnd step is to determine how much the child already knows about what is to be taught. An Entry Behavior Inventory and diagnostic tests help teachers decide where each child needs to begin working in the sequence leading to academic objectives. Motivation is taught with the help of incentives such as teacher-praise and child selection of favorite activities. A token system rewards the child with tokens for behavior and improvement at learning tasks. Tokens may be accumulated and exchanged later for activities such as recess and a chance to play games with classmates. To be effective, tokens must be used for immediate reinforcement and delivered at frequent intervals when the child is learning steps of a new and difficult task. A classrcom team of teacher and aides makes it possible for each child to receive personal attention and reinforcement. Parent participation, in the classroom and at home, is a key factor in the success of the Behavior Analysis approach. The curriculum, the daily schedule, and the use of reinforcement techniques for discipline are discussed. Program and staff develcpment and evaluation are described. (NH)

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THE BEHAVIOR ANALYSIS CLASSROOM

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INTRODUCTION

Behavior Analysis is a new strategy for education. During the past five years, it has grown from a handful of experimental settings to hundreds of elementary classrooms throughout the nation. Successful Behavior Analysis classrooms have begun to transform the learning experiences of thousands of children. In the rural south, the industrial northeast, the urban midwest, and on Indian reservations in the west and southwest, children are learning more, with greater enjoyment and confidence than has been possible in the past.

Behavior Analysis combines familiar educational techniques in a unique way to provide a new kind of learning opportunity for young children. The program includes aspects of team teaching, non-graded classrooms, programmed instruction, individualized teaching, and token reinforcement systems. The result is an education system which--

- *accelerates the learning and achievement of the children,*

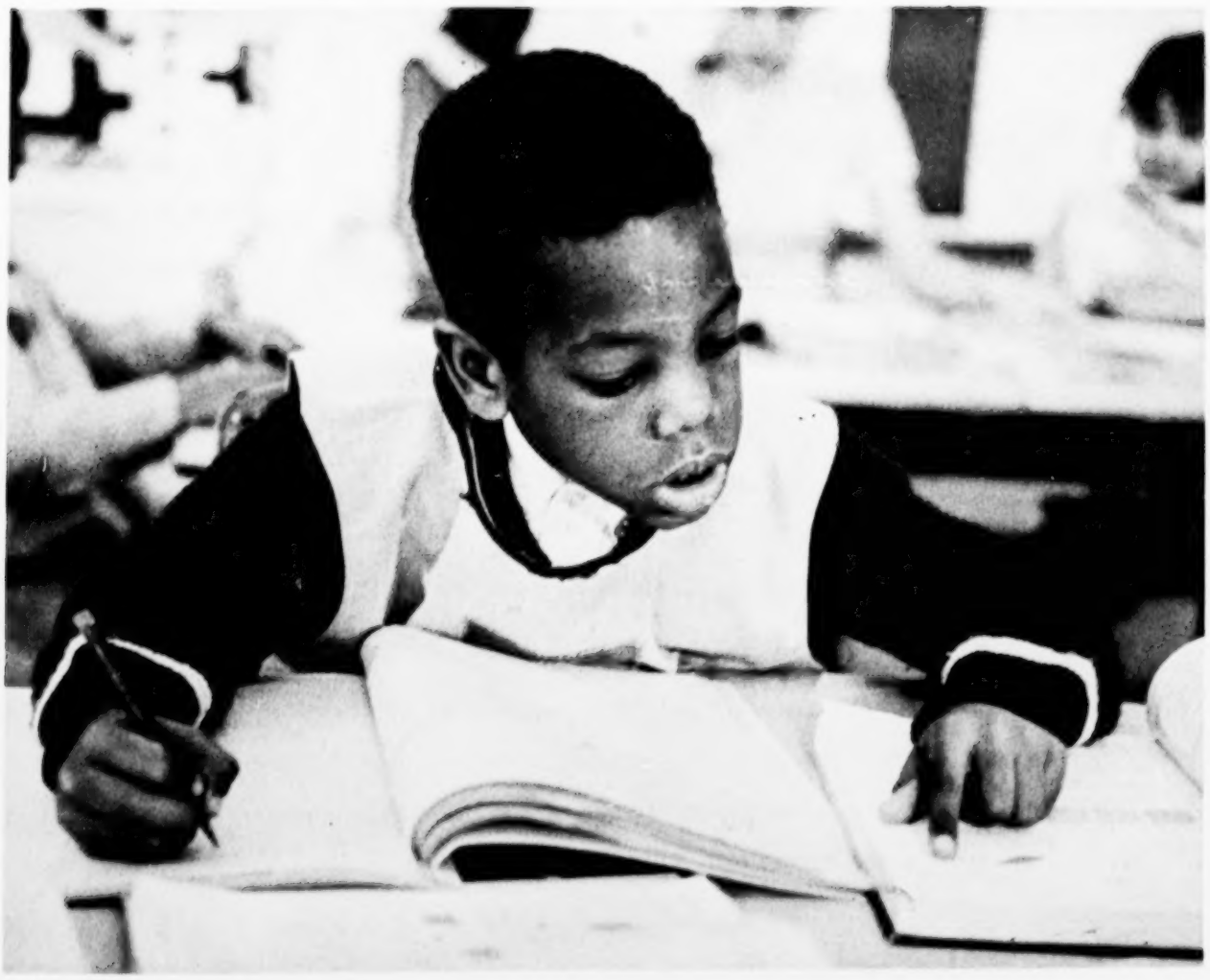
  and

- *unites professional educators, para-professionals, and parents in the teaching process.*

There is no mystery connected with this new system. The basic principles of human learning have been understood for some time. Behavior Analysis has taken these principles out of the laboratory classroom and put them to work in schools.

As an instructional system, Behavior Analysis follows a standard but flexible pattern. The first step, whether the child is being taught social or academic skills, is to *define an instructional objective.* The goals of teaching a child to say "Good morning" when he enters the classroom, or to put materials away when he is finished with them, are just as legitimate as instructional objectives in reading and mathematics.

The second step in Behavior Analysis is to *determine how much the child already knows* about what you are trying to teach. The skills which



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children bring into the classroom vary so much that it is not realistic to begin everyone in the same lesson. A special Entry Behavior Inventory and diagnostic tests help a teacher decide where each individual child needs to begin working in the sequence leading to several instructional objectives in academic areas. At higher levels of achievement, these diagnostic tests are imbedded in the materials to insure that each child is mastering each instructional objective before being moved on to the next part of the sequence.

With an established instructional objective and knowledge of a child's current skill in relation to that objective, the steps between can be taught more easily if the child is well motivated to learn.

MOTIVATION: THE TOKEN ECONOMY

Behavior Analysis assumes that "motivation" does not just happen--*it is taught*. It is the result of carefully executed procedures which provide the incentives needed to guarantee that a child will begin and carry through on learning tasks. There are many potential incentives present in every classroom. The smiles and praise of a teacher, the chance to participate in recess and games with classmates, stories, attractive materials, and the chance to select a particular favorite activity can all be good incentives if properly used.

When activities the children prefer are available as a direct consequence of a particular behavior, they are valuable incentives, or reinforcers, which can generate and sustain motivation and progress. If these same activities are available automatically, regardless of what the child may do, they have very little incentive value. The timing of the consequence and its clear relationship to a particular behavior make a crucial difference. When praise *immediately* follows a child's behavior, it will usually reinforce, or strengthen, that behavior. If it comes too soon or too late it will have little or no effect--*timing is the key*.

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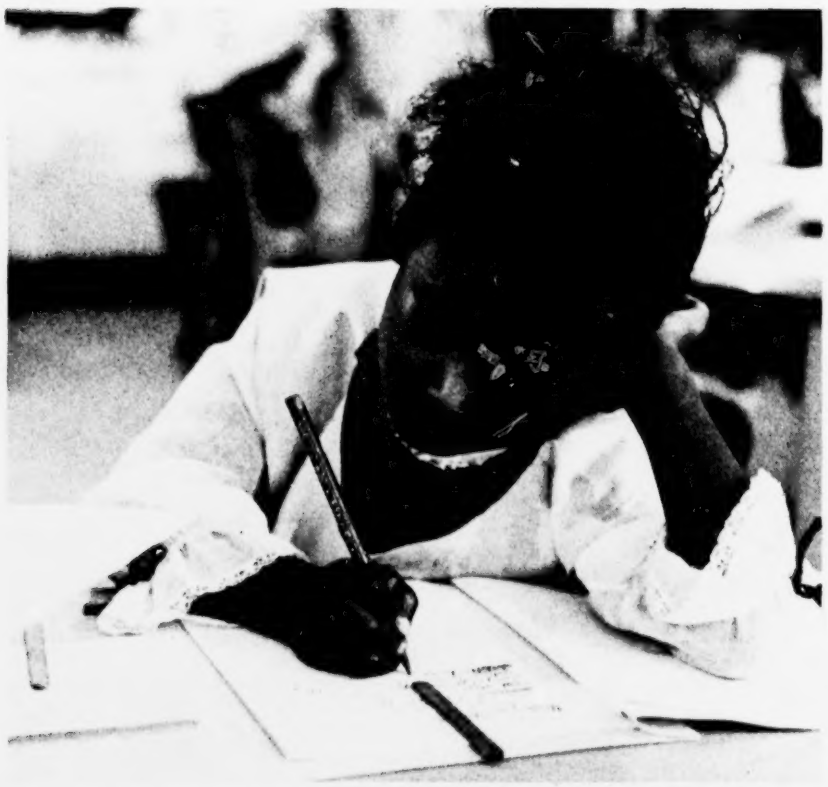
As skill increases, tokens...



will follow the writing of a complete sentence.

Because many reinforcing events are hard to deliver with the necessary immediacy, Behavior Analysis classrooms use a Token Exchange System to sustain a high level of motivation. As each child in the class works at various learning tasks, he is given tokens for his progress and improvement. Later, after he has accumulated several tokens in this way, he has the opportunity to exchange them for events and activities which are important to him. These back-up activities give meaning and value to the tokens. As long as the back-ups are exciting and enjoyable, the tokens will support the child's motivation to learn and to succeed.

Tokens, in addition to being properly timed, must be delivered frequently to be most effective. When a child is faced with a new and difficult task, tokens are given often for small amounts of progress. At a later stage, as the child's skill improves, fewer tokens are needed to support progress. Consequently, the way a child earns tokens is constantly changing. At first, tokens and praise will follow a child's first attempt at holding a pencil correctly. Later, as skill increases, the tokens and praise will follow the writing of a complete sentence.

THE CLASSROOM STAFF AND THE PARENT PROGRAM

The requirement of frequent attention and reinforcement for each individual child is difficult, if not impossible, for one teacher who must deal with an entire class of thirty or more children. To provide the necessary amount of individual attention, Behavior Analysis classrooms are staffed by four adults. The lead teacher heads the team and generally takes special responsibility for reading instruction. The full-time aide usually takes special responsibility for the small math groups; and two parent aides concentrate on handwriting and spelling lessons and individual tutoring. This kind of team arrangement insures that every child receives the personal attention and reinforcement needed for him to learn at his maximum rate.

Parents create a new potential for individualized classroom instruction.

A program of parent participation is one of the key factors in the success of the Behavior Analysis approach. With proper training, the parents have become valued instructors in the classroom. Without them it would not be possible for the lead teacher and aide to enjoy the advantages of small group teaching. Parents who have worked in the classroom are also extending the benefits of the program into the home situation. With an understanding of classroom process and the principles of positive reinforcement, the parents are able to join professional teachers as partners in the education of the community's children.

Parents are employed in the classroom in a series of positions which provide improved career opportunities. During the first year, a parent serves for six to eight weeks in the classroom as a trainee. This relatively short work period enables a large number of parents to have direct contact with the program. At the next level, some parents who have been trainees are employed as aides for an entire semester. Finally, some of those who have been semester aides are employed to fill full-time positions as teacher aides. The result of this sequence is a new kind of unity between school and community, a new set of opportunities for parents, and a new potential for truly individualized classroom instruction.

THE CURRICULUM

To take advantage of these new opportunities, Behavior Analysis classrooms select curriculum materials that:

1. *describe the behavior the child will be capable of at the end of the sequence,*
2. *require frequent responding by the child,*
3. *contain clear criteria for a "correct" response,*
4. *allow for individual rates of progress, and*
5. *provide for periodic testing of achievement gains.*

The combination of (a) materials which meet these requirements, (b) multiple teachers, and (c) a token exchange system creates a new kind of educational setting where children learn more rapidly--*and enjoy it.* Following an initial emphasis on the development of social and classroom skills, the core subjects of reading, mathematics, and handwriting are stressed in Behavior Analysis classes. Instruction in these areas begins during the child's first year in the program (Head Start or Kindergarten). There is no longer any doubt that children of four and five are willing and able to learn these subjects when they are presented in small group and individual situations, supported by effective reinforcement.

THE DAILY SCHEDULE

The daily schedule of a Behavior Analysis classroom can be described in three parts:

1. *planning*
2. *formal instruction*
3. *special activities, or back-ups*

Twenty-five to thirty children at different performance levels and four adults make a complex organization which must be carefully managed if it is to be successful. To insure a smooth operation that is always ready to meet the changing needs of the children, a period is set aside each day for staff planning. Directed by the lead teacher, these sessions allow the classroom team to discuss specific strategies to be used with particular children, new or problematic sections of the curriculum, revisions in classroom routine, and back-up activities.

The specific lesson plan for any given day is *always determined by the progress of the children.* In general, however, the three core subjects are all taught during each instructional period. By providing at least three periods during the day, each child receives instruction in every subject.

Children learn more rapidly

in individual and small group situations.

Every instructional period is planned in conjunction with the back-up activity which will follow. At the beginning of a year there is frequent alternation between instruction (earning periods) and special back-ups (exchange periods). Ten to fifteen minutes of instruction, followed by twenty to twenty-five minutes of exchange activity, followed by another fifteen minutes of instruction, etc., is a common pattern. As the children become more skillful, the amount of study time increases, and the end of the year may find a schedule which provides for 45-50 minutes of study for each ten to fifteen minutes of special activity. At the second or third grade level it is not unusual for twenty minutes of *contingent* special activity to support an entire morning's work.

DISCIPLINE

When appropriate behavior has the immediate consequence of providing greater access to activities and events of value to the child, low motivation and other factors which contribute to behavior problems are usually eliminated.

Behavior Analysis uses positive reinforcement to build improved student behavior and seeks to eliminate all coercive or negative control procedures. Verbal or physical coercion or threats are not used, but the absence of these techniques should *not* be confused with permissiveness. Misbehavior cannot be tolerated in a classroom for it may accidently meet with reinforcement that will strengthen (teach) it.

Rather than nagging, scolding, or threatening punishment for inattention, the Behavior Analysis teacher first provides heavy reinforcement to another child who *is* attending to the assignment. Then, when the inattentive child starts to work, he is immediately praised by the teacher. The general strategy is to *ignore inappropriate behavior while providing heavy and frequent reinforcement for desirable behavior.*

At the beginning of the year, there is frequent alternation between instruction

and special activity.

Behavior which is potentially damaging or dangerous cannot be ignored. The procedure used in such circumstances is technically known as "Time-Out." Time-Out is accomplished without emotion, lectures, or scolding, but is consistently the *immediate* consequence of dangerous behavior. The child is immediately told what rule he has broken and then seated in a chair away from the other children. He remains there with a kitchen timer set for three minutes. As soon as the bell rings, the child returns to the group to be rewarded for his appropriate behaviors. His penalty is that for three minutes there has been no opportunity to engage in behavior that results in token reinforcement.

These are only two examples of procedures which correct unacceptable classroom behavior without the unwanted side-effects which are part of harsh, coercive punishment.

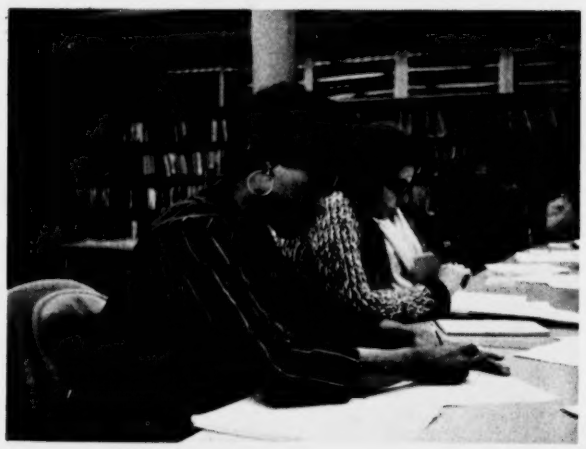
PROGRAM AND STAFF DEVELOPMENT

The full development of a Behavior Analysis program usually occurs in *three* phases. Initially, substantial support is provided by the University of Kansas. During this phase, the local school district provides an organizational base with a Program Coordinator and a Parent Coordinator. The Program Coordinator is responsibile for making the many elements of the project mesh together in a coherent program, and the Parent Coordinator introduces the program to the community and recruits parents to work in the classrooms. For the first year or two, advisors from the University of Kansas provide necessary training in the procedures and techniques of the program. Workshops at Regional Training Centers, District Workshops, and an inservice course in the Principles of Behavior Analysis are among the procedures used to supplement and support program implementation.

During the second phase of the program, local leadership reduces the district's need for strong support from the University of Kansas. As

the project grows in size, local Staff Training Coordinators assume more and more of the training and support responsibility. Staff Training Coordinators and Parent Training Coordinators are the local experts in the methods and procedures of Behavior Analysis; and they are skilled in teaching this to other teachers, aides, and parents. People who fill these positions are generally drawn from the group of Behavior Analysis teachers and parents who have had classroom experience in the program.

The third phase of the program generally begins as the first group of children complete the third grade. By this time, local training staff, experienced teachers, aides, and parents are able to continue the program and extend its benefits to children in other parts of the school system. From this point on, only periodic consulting by the University of Kansas is needed to maintain the vitality and progress of the program.



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Local leadership extends the program's benefits.

BEHAVIOR ANALYSIS IN HEAD START

The basic ingredients and strategies of Behavior Analysis are as relevent in Head Start as in elementary classrooms. Four cooperating adults use carefully timed and frequent reinforcement to accelerate the children's progress toward clearly stated instructional objectives.

The curriculum used in Head Start is designed to teach the skills needed to succeed in the elementary grades whether the child continues in a Behavior Analysis program or not. By the end of the year, Behavior Analysis Head Start children work in pre-reading, mathematics, and handwriting groups, although a variety of preacademic behaviors are emphasized during the first half of the year.

Positive and systematic reinforcement is used to teach the entire constellation of behaviors which make up the social role of the student. From the beginning of the year, teachers reinforce a child immediately and enthusiastically for following simple directions in all situations

where instructions are used. Children who say "Good morning" to their teacher, who raise their hands when appropriate, who can distinguish between the time to talk and the time to listen, who can stay with an assigned task and who respond appropriately to the praise and compliments of the teachers, have an advantage in mastering the school situation. These skills can be clearly analyzed and effectively taught as a background to more formal academic lessons.

The unfortunate assumption that Head Start children are not "ready" for formal instruction is no longer true. When lessons are correctly presented and responses result in *positive reinforcement*, the Head Start child quickly learns the excitement and enjoyment of reading and mathematics.

EVALUATION

Continuing evaluation of student progress is the guide to program development. During the opening year of a project, this evaluation is provided by the University of Kansas. Gradually, *all* evaluation procedures are taken over by the lead teacher in each classroom or by Staff Training Coordinators.

Straightforward procedures allow a teacher to adjust the allocation of her instructional periods to meet the changing needs of the students, and Individual Progress Records chart the advances of every child in the class. Easily kept, these records provide continuing feedback which the teacher can use to assess the appropriateness of her classroom organization, to modify her procedures, and to adjust quickly to the needs of any child whose progress is lagging.

Video tapes of small group lessons, coupled with clear definitions of appropriate and inappropriate teaching behaviors, allow each teacher to alter her techniques so as to maximize the progress of every child.

Special training is given to Staff Training Coordinators to help them give personal coaching to teachers as they view their own video tapes.

In addition to the large array of internal evaluation and feedback procedures, the usual range of achievement tests and class records permit each project to be clearly *accountable to the community* which it serves.

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Cindy Stewart

BEHAVIOR ANALYSIS FOLLOW THROUGH DISTRICTS